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(54) A bangle

(57) A bangle of a generally annular form and of a substantially rigid material, having a cavity in the form of an elongate recess 6 open inwardly of the bangle. A fragrance or scent container 5 received in said cavity and releasably engaged by edges 10 of the cavity which are adapted to resiliently deflect or deform to permit entry and removal of the container from the cavity. An aperture 27 in the bangle communicating the cavity with the exterior of the bangle, and a manually operable pump 25 mounted on the container and arranged when operated to deliver scent or fragrance from the container through the aperture. The bangle may be provided with removable snap-on outer rings (35, 36, fig 2) which enable the appearance of the bangle to be altered.

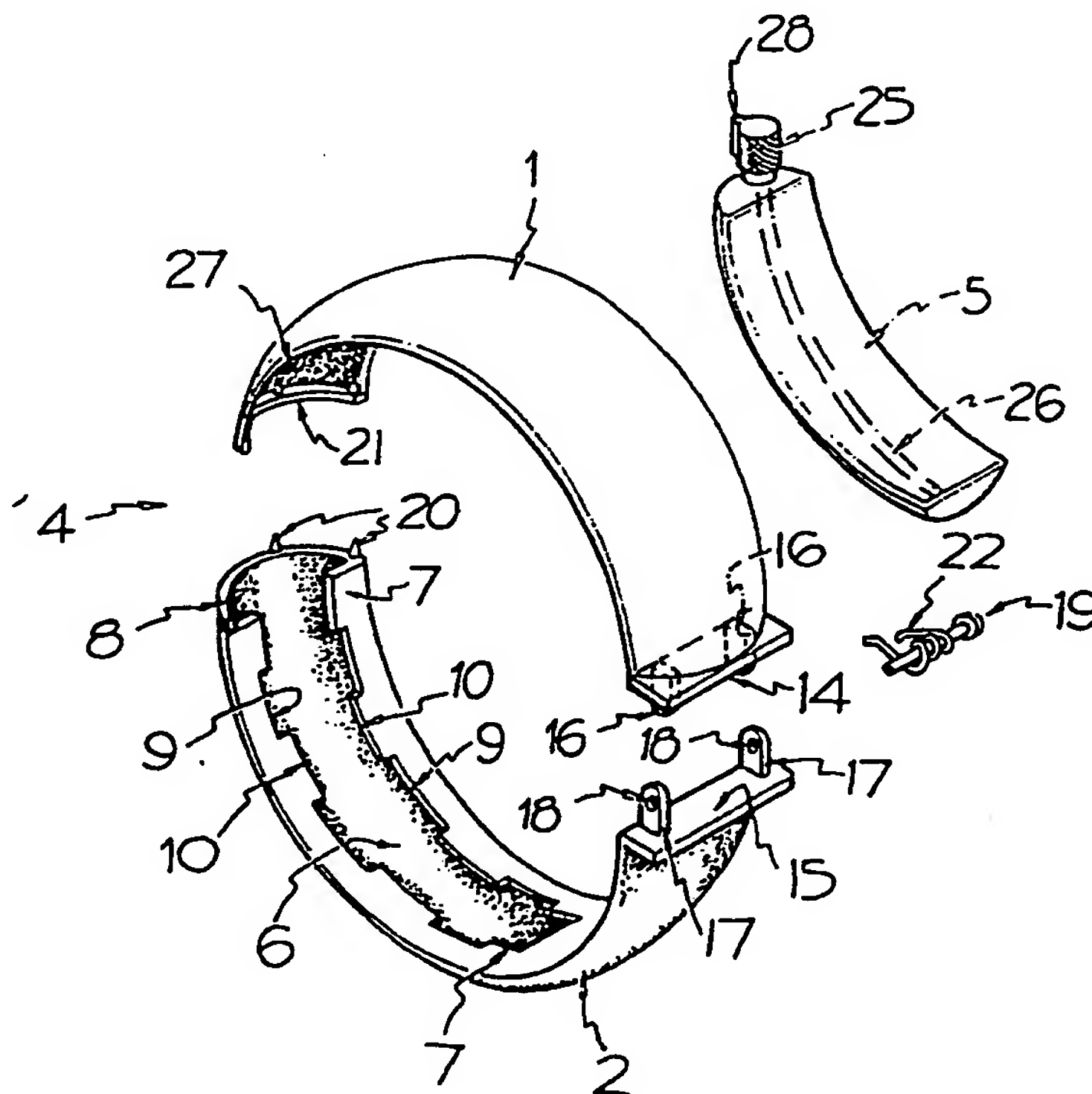


FIGURE 1

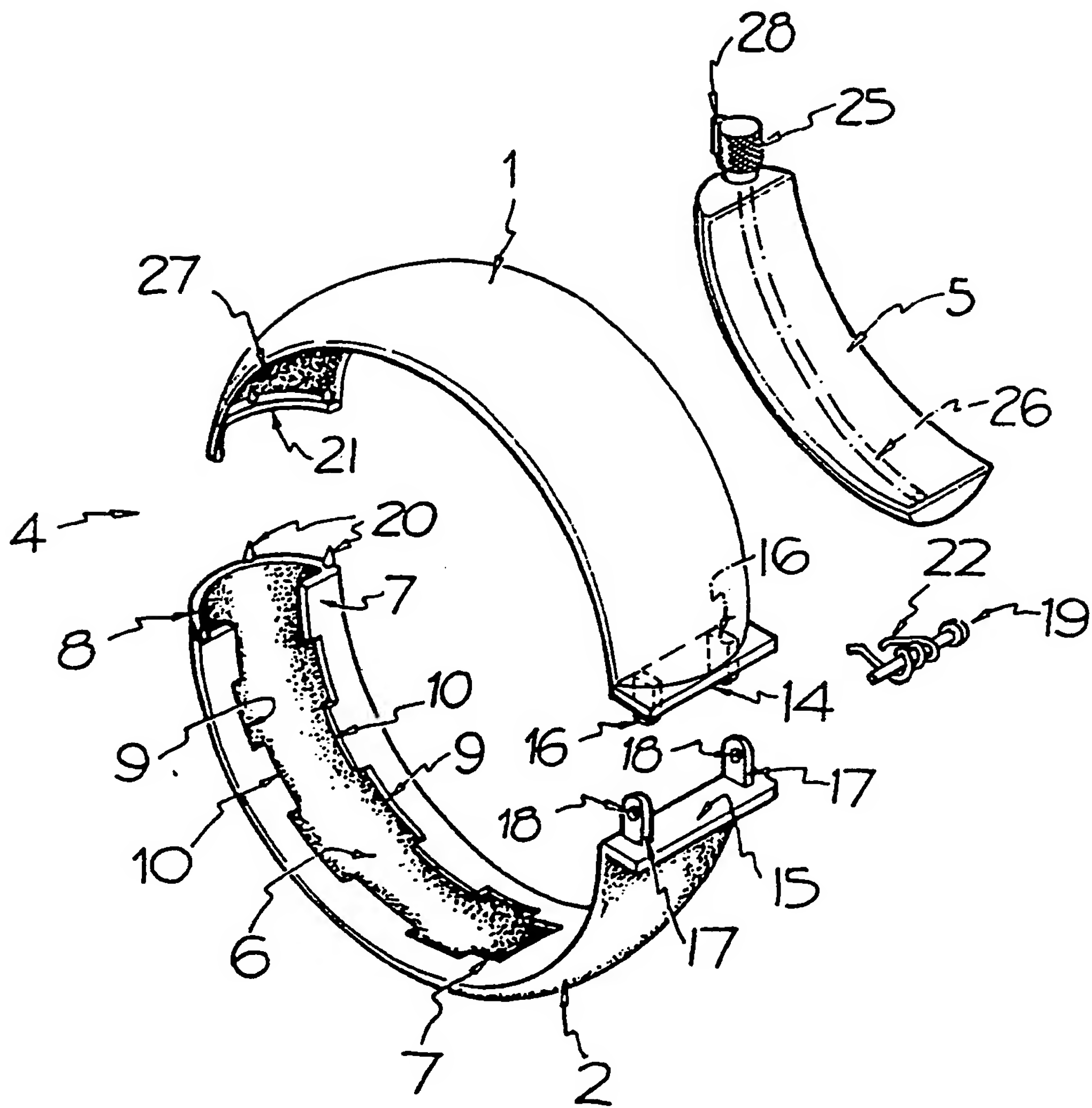


FIGURE. 1

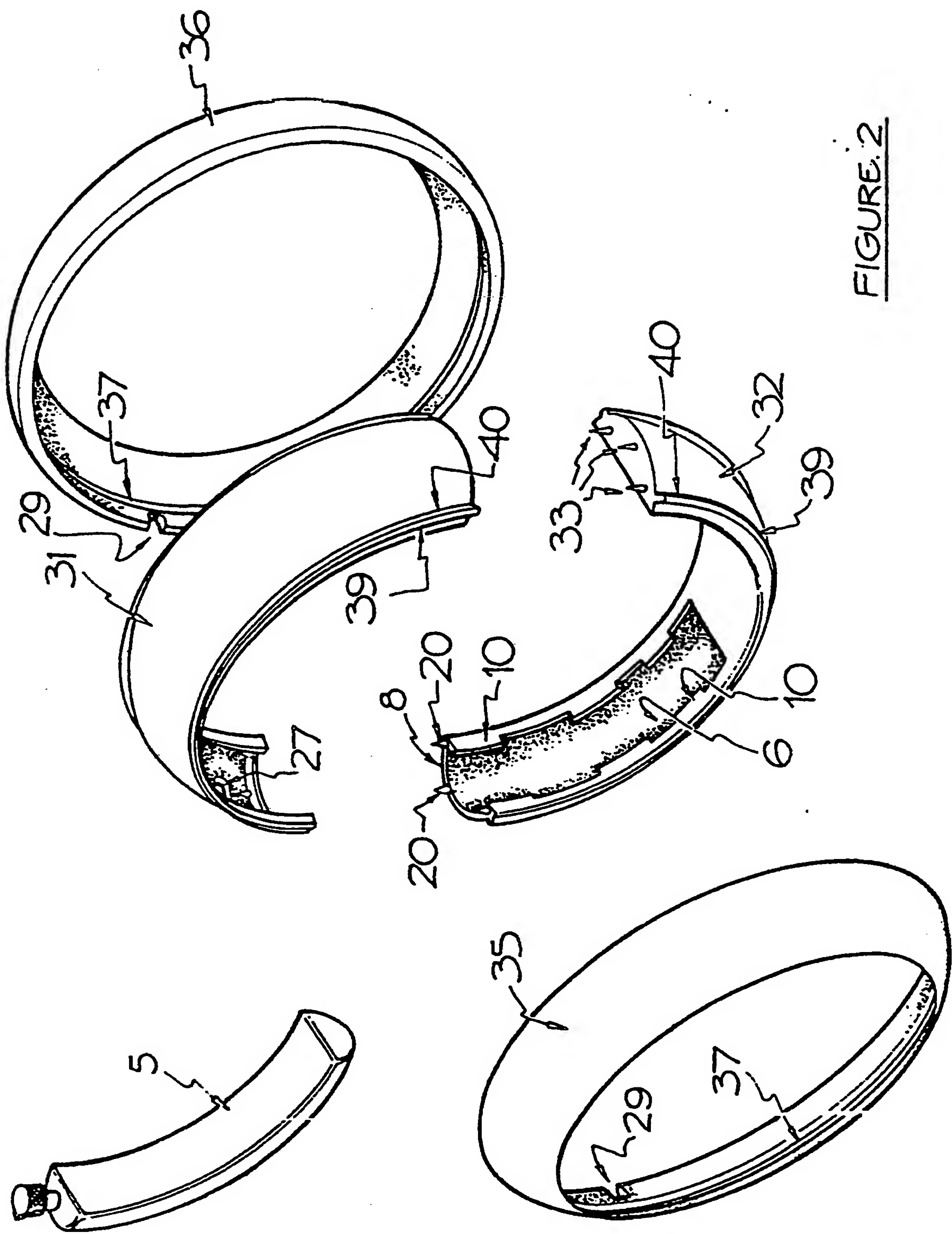


FIGURE 2

FIGURE. 4

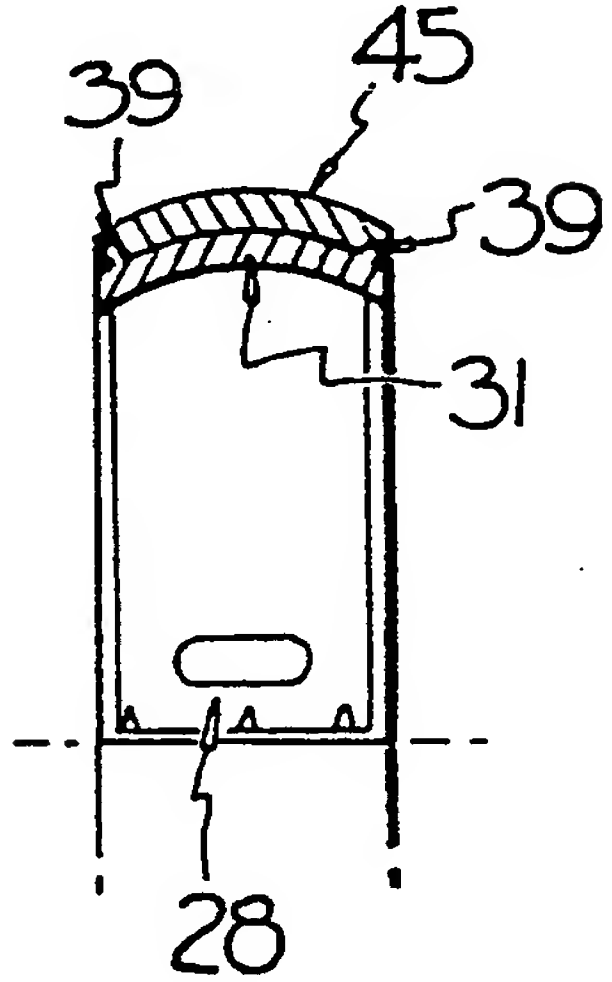
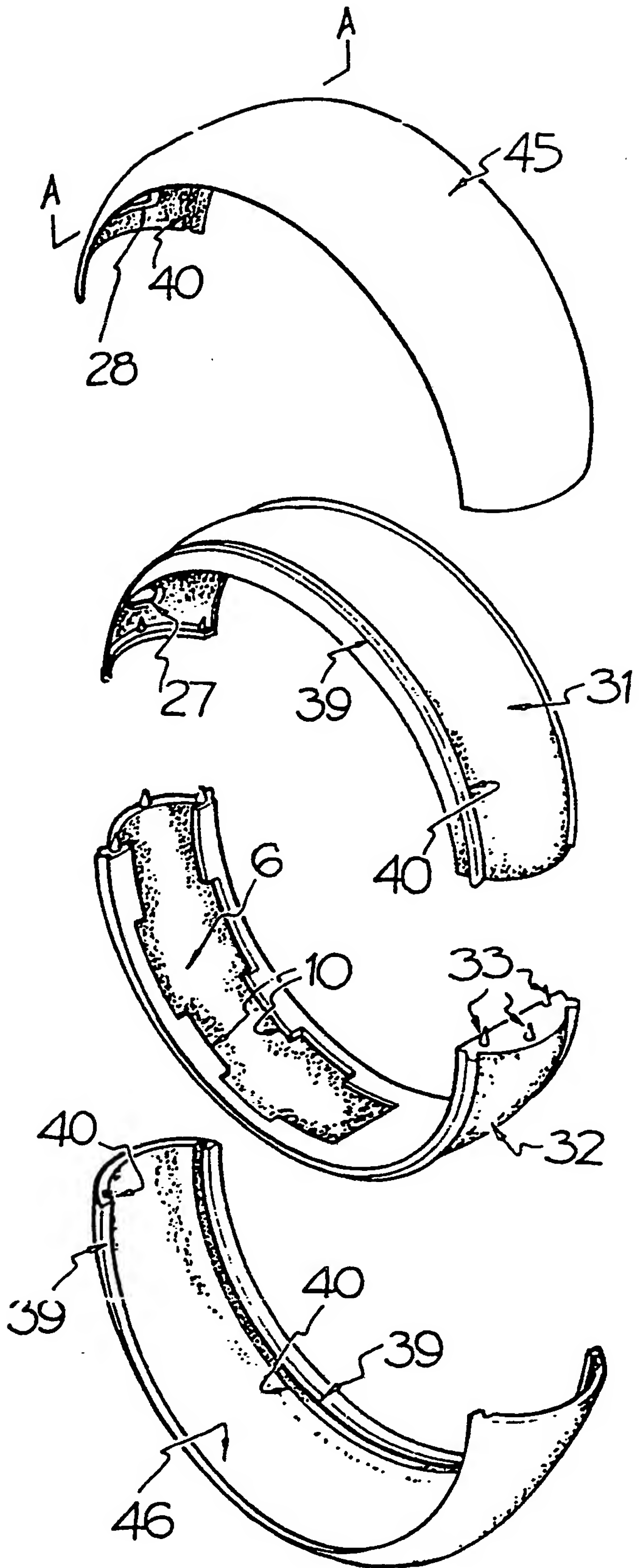
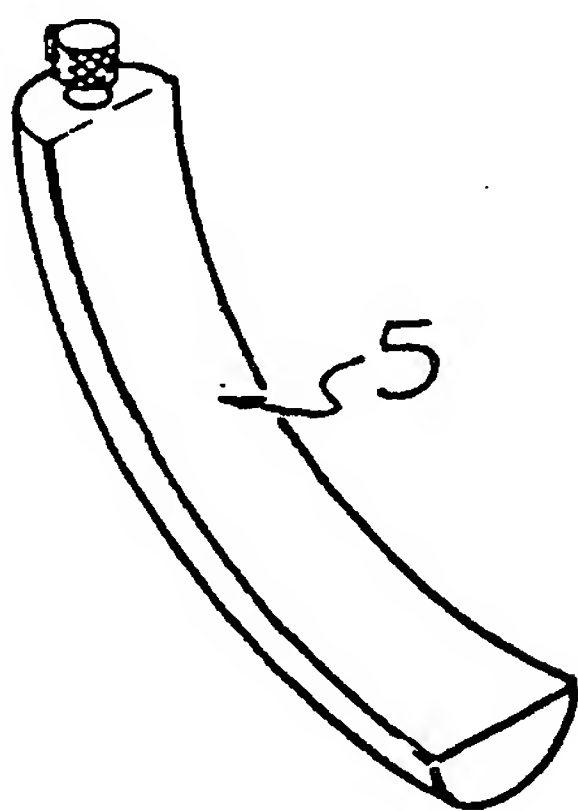


FIGURE. 3



IMPROVED BANGLE

This invention relates to a bangle as worn on the arm, usually of women and girls, and the object of the invention is to provide such a bangle which has incorporated
5 therein provision for the dispensing of a liquid such as a scent or fragrance.

With this object in view, there is provided according to the present invention, a bangle of a generally annular form and of a substantially rigid material, a cavity
10 in a section of the bangle and open inwardly thereof, a fragrance of scent container received in said cavity and releasably engaged with the bangle, an aperture in the bangle communicating the cavity with the exterior of the bangle, and a manually operable pump mounted on the
15 container and arranged when operated to deliver scent or fragrance from the container through the aperture.

Preferably the pump is located so that it may be digitally operated from inside of the bangle to issue a spray through the aperture from the opposite side of the
20 bangle.

Conveniently the cavity is in the form of an elongate recess open inwardly of the bangle and having opposite edges at the junction with the internal face of the bangle, said edges being adapted to resiliently deflect or
25 deform to permit entry and removal of the container from the cavity.

The bangle may take a wide variety of forms, including a one-piece or multi-piece bangle. The multi-piece bangle may take the form of two or more annular
30 elements assembled together in a coaxial relationship to form the complete bangle. In a further form, the bangle may be in the form of two semi-circular sections or a number of arcuate sections hinged or otherwise connected, with the cavity located in one section. Conveniently there are two
35 substantially semi-circular sections releasably interconnected to each other and each end. Alternatively the two sections are pivotally connected at one end and are releasably interconnected at the other end.

There may be provided to combine with the bangle at least one annular member having an internal face complementary to an annular portion of the external face of the bangle, said internal and external faces having
5 respective snap action engagable element to secure the annular member to the bangle. Alternatively there may be provided two semi-circular members each having an internal face complementary to the external face of the respective
10 sections of the bangle, said internal and external faces having respective snap action engagable elements to secure the semi-circular members to the respective bangle sections.

The invention will be more readily understood from the following description of several embodiments of a bangle incorporating the present invention and as depicted in the
15 accompanying drawings.

In the drawings:

Figure 1 is an exploded perspective view of one embodiment of the invention;

Figure 2 is an exploded view of the second
20 embodiment of the invention;

Figure 3 is an exploded view of a third embodiment of the invention;

Figure 4 is a partial sectional view along the line A-A in Figure 3.

25 Referring now to Figure 1 of the drawings, the bangle comprises two arcuate sections 1 and 2, which together constitute a complete substantially true circle annular bangle. The sections 1 and 2, which for convenience will be referred to respectively as the top and bottom
30 sections, are hingeably connected by a hinge structure at 3 and may be secured in the true circle annular form by inter-engaging elements on the respective sections 1 and 2 at 4.

The lower section 2 has an inwardly open recess 6
35 extending from the end face 8 through an arc of approximately 90°. The arcuate length of the recess 6 may vary from 90° in either direction in accordance with the

capacity of the fragrance reservoir as hereinafter referred to. The oppositely facing edges 7 of the recess 6 are provided with spaced notches 9 so as to provide along said edge a plurality of spaced tangs 10.

5 The end portions 11 and 12 of the upper and lower sections 1 and 2 of the bangle present opposed generally flat faces 14 and 15, with pairs of lugs 16 and 17 respectively projecting therefrom. When assembled the lugs 16 are received between the lugs 17 with the apertures 18 in
10 the respective lugs aligned. The pivot pin 19 passes through the apertures 18 to secure the upper and lower sections 1 and 2 in a hinged relation. A torsion spring 22 in Figure 1, may be supported on the pin 18 between the lugs 16 with the spring 22 configured to either apply forces to
15 the end portions 11 and 12 of the upper and lower sections 1 and 2 so as to either urge them in a direction to open or close the sections relative to one another.

 The end face 8 of the lower section 2 is provided with a series of three projections 20 and the complementary
20 face 21 on the upper section 1 is provided with complementary recesses (not shown) to receive in frictional engagement the projections 20. The projections 20 and the complementary recesses are dimensioned so that when inter-engaged, sufficient frictional forces will be
25 developed therebetween to maintain the upper and lower sections of the bangle in a closed full circle configuration, whilst in position on the arm of the wearer, and to withstand such forces as will normally be encountered while being worn.

30 The fragrance container 5 is of an arcuate shape and of a generally semi-circular cross-section so as to be complementary to the recess 6 in the lower section 2 of the bangle. The container 5 is of a hollow construction so that a quantity of a fragrance or scent may be held therein. A
35 conventional pump unit as commonly used dispensing fragrances or scents from bottles or the like, is fitted to one end of the container 5, as indicated at 25, with the

conventional tube 26 extending from the pump 25 to adjacent the opposite end of container 5, and with the end thereof open in free communication with the interior of the container 5.

5 The container 5 and the recess 6 are dimensioned so that the container 5 may nest within the recess 6 and the tangs 10, and to a lesser extent the edge portions 7, are sufficiently resiliently deformable so that the container 5 may be snapped into position in the recess 6 by applying
10 generally radially directed forces between the lower section 2 of the bangle and the container 5 to effect assembly thereof. It will be appreciated that the arcuate cross-section of the lower section 2 of the bangle, in the area where the recess 6 is provided, will enable a degree of
15 expansion of the lower section of the bangle to increase the dimension between the oppositely opposed tangs 10 to assist in the snap action assembly of the container 5 in addition to the deflection of the tangs 10.

 An aperture 27 is provided in the arcuate surface
20 of the upper section 1 of the bangle adjacent the end 8 of the lower section 2. The aperture 27 is positioned so that when the upper and lower sections of the bangle are in the closed position, the nozzle 28 of the pump unit 25 will be aligned with the aperture 27. With this arrangement, the
25 fragrance or scent dispensed from the container 5 through the nozzle 28 will pass through the aperture 27 to be applied as desired by the wearer of the bangle.

 In the alternative construction of the bangle as shown in Figure 2, the general constructions of the upper
30 and lower sections 31 and 32 are the same as previously described with respect to Figure 1, except the hinge assembly 3 has been replaced by a series of projections 33 and complementary holes 34 in each of the ends of the upper and lower sections 31 and 32. The two sections 31 and 32
35 are thus secured together by the engagement of the pins in the respective ends of the lower section 31 with the cavities in the upper section 32 and the development of the

frictional forces therebetween. The recess 6 in the lower section 32 of the embodiment in Figure 2 is of the same construction as previously described with respect to Figure 1 and shall not be further described herein. Also the
5 fragrance container 5 is of the same constructions as previously described and is assembled into the recess 6 in the same manner.

The principal difference between the construction shown in Figure 1 and 2 is the provision of snap-on outer
10 rings 35 and 36, which may be releasably attached to the bangle formed by the assembly of section 31 and 32 together. Each of the snap-on rings is of the same construction, each being of a slightly dished form with an internal annular shoulder 37. The outer generally semi-circular external
15 surface of the annulas, formed by the assembly of sections 31 and 32, is provided with outwardly projecting ribs 39 which form shoulders 40. It will be appreciated that when the upper and lower sections 31 and 32 are assembled together, the snap-on rings 35 and 36 can be assembled
20 thereto from the respective sides of the bangle, with the shoulders 37 on the snap-on rings snapping and locking onto the shoulders 40 on the bangle sections 31 and 32.

The provision of the snap-on rings 35 and 36 are for the purpose extending the use of the bangle so that
25 snap-on rings of different colours may be applied to the basic assembly of the upper and lower sections 31 and 32 of the bangle to provide required colour co-ordination with the clothing being worn. Apart from the snap-on rings being different in colour from the basic bangle, they may also
30 differ in colour from one another. In a further modification, the snap-on rings may have an axial length selected so that when the two snap-on rings are assembled to the base bangle, there remains an annular strip on the base bangle exposed between the opposing edges of the snap-on
35 rings, which gives a further colour combination.

Figure 3 is a further modification of the bangle where an alternative construction of a snap-on section is

provided. The upper and lower sections 31 and 32 of the base bangle are identical to that previously described with reference to Figure 2 of the drawings, including the provision of the peripheral ribs 39 and shoulders 40. In this modification the snap-on sections 45 and 46 are of semi-circular configuration, and in cross-section generally correspond to the cross-section of the external face of the bangle sections 31 and 32. Each of the snap-on sections 45 and 46 are again provided on the internal surface with shoulders 47 and 48, which inter-engage in a snap action with the shoulders 40 on the bangle sections 31 and 32. Again, the snap-on sections 45 and 46 are provided purely for decorative purposes and are of a different colour to the main sections 31 and 32 of the bangle and if desired two snap-on sections of different colour may be assembled to the one bangle.

In each of the constructions described with reference to the accompanying drawings, the bangles may be made of any suitable mouldable material and preferably the two sections of the bangle are made of polypropylene whilst the snap-in fragrance or scent container may be made of a low density polyethylene. Normally the snap-on outer rings or sections that may be applied to the base bangle will also be made of polypropylene.

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I CLAIM:

1. A bangle of a generally annular form and of a substantially rigid material, a cavity in a section of the bangle and open inwardly thereof, a fragrance of scent container received in said cavity and releasably engaged with the bangle, an aperture in the bangle communicating the cavity with the exterior of the bangle, and a manually operable pump mounted on the container and arranged when operated to deliver scent or fragrance from the container through the aperture.
2. A bangle as claimed in claim 1, wherein the cavity is in the form of an elongate recess open inwardly of the bangle and having opposite edges at the junction with the internal face of the bangle, said edges being adapted to resiliently deflect or deform to permit entry and removal of the container from the cavity.
3. A bangle as claimed in claim 2 having a plurality of spaced tangs along at least one of said opposite edges to resiliently deflect or deform.
4. A bangle as claimed in any one of claims 1 to 3, comprising two or more sections interconnected in an annular formation.
5. A bangle as claimed in any one of claims 1 to 3 wherein the bangle comprises two substantially semi-circular sections releasably inter-connected to each other and each end.
6. A bangle as claimed in any one of claims 1 to 3, wherein the bangle comprises two substantially semi-circular sections pivotally connected at one end and are releasably inter-connected at the other end.

7. A bangle as claimed in claim 6 including means interacting between the two sections to urge said other ends of the sections together.

8. A bangle as claimed in claim 5, 6 or 7, wherein the cavity is in one section and the pump on the container extends into a recess in an adjoining portion of the other section, said aperture being formed in said recess in the other section.

9. A bangle as claimed in any one of the preceding claims and an annular member having an internal face complementary to an annular portion of the external face of the bangle, said internal and external faces having respective snap action engagable element to secure the annular member to the bangle.

10. A bangle as claimed in claim 9 and two said annular members secured to said bangle with the members in opposing relation on opposite sides of the bangle.

11. A bangle as claimed in claim 5, 6, 7 or 8, and two semi-circular members each having an internal face complementary to the external face of the respective sections of the bangle, said internal and external faces having respective snap action engagable elements to secure the semi-circular members to the respective bangle sections.

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